

CLAIMS

We claim:

1. A microbicidal composition comprising:
 - (a) 0.5 to 20 percent, based on weight of the composition, of haloalkynyl compound;
 - (b) 0.3 to 10 percent, based on weight of the composition, of chelated metal ion compound;
 - (c) 40 to 99 percent, based on weight of the composition, of water; and
 - (d) zero up to 30 percent, based on weight of the composition, of 3-isothiazolone compound.
2. The composition of claim 1 wherein the haloalkynyl compound is selected from one or more of the group consisting of 3-iodo-2-propynylpropylcarbamate, 3-iodo-2-propynylbutylcarbamate, 3-iodo-2-propynylhexylcarbamate, 3-iodo-2-propynylcyclohexylcarbamate and 3-iodo-2-propynylphenylcarbamate.
3. The composition of claim 1 wherein the chelated metal compound comprises metal ion selected from one or more of copper, zinc, ferric, magnesium, cobalt and silver ions.
4. The composition of claim 1 wherein the chelated metal compound comprises metal ion chelated with one or more amine chelating agents selected from the group consisting of alkylene polyamines and carboxylate-containing amine compounds.
5. The composition of claim 4, wherein the chelated metal compound is in the form of a 1:1 molar complex of amine chelating agent and copper ion.
6. The composition of claim 4 wherein the amine chelating agent is selected from one or more of ethylenediaminetetraacetic acid and salts thereof, hydroxyethylenediaminetetraacetic acid and salts thereof, 1,3-diaminopropane-tetraacetic acid and salts thereof, 1,2-diaminocyclohexanetetraacetic acid and salts thereof, 1,2-propylenediaminetetraacetic acid and salts thereof, ethylenediamine, propylenediamine, diethylenetriamine and triethylenetetraamine.
7. The composition of claim 1 comprising 1 to 25 percent of 3-isothiazolone compound.

8. The composition of claim 1, wherein the 3-isothiazolone compound is selected from one or more of 2-n-octyl-3-isothiazolone, 4,5-dichloro-2-n-octyl-3-isothiazolone, benzisothiazolone and N-alkyl derivatives of benzisothiazolone.

9. A microbicidal composition comprising:

5 (a) 5 to 10 percent, based on weight of the composition, of haloalkynyl compound selected from one or more of 3-iodo-2-propynylpropylcarbamate, 3-iodo-2-propynylbutylcarbamate, 3-iodo-2-propynylhexylcarbamate, 3-iodo-2-propynylcyclohexylcarbamate and 3-iodo-2-propynylphenylcarbamate;

10 (b) 2 to 5 percent, based on weight of the composition, of chelated metal ion compound, wherein the chelated metal ion compound is a 1:1 molar complex of amine chelating agent and copper ion and the amine chelating agent is selected from one or more of ethylenediaminetetraacetic acid and salts thereof, 1,3-diaminopropanetetraacetic acid and salts thereof,
15 thereof, 1,2-propylenediaminetetraacetic acid and salts thereof, 1,2-diaminocyclohexanetetraacetic acid and salts thereof, and ethylenediamine;

(c) 60 to 70 percent, based on weight of the composition, of water;

(d) 10 to 20 percent, based on weight of the composition, of
20 3-isothiazolone compound selected from one or more of 2-n-octyl-3-isothiazolone, 4,5-dichloro-2-n-octyl-3-isothiazolone, benzisothiazolone and N-alkyl derivatives of benzisothiazolone; and

(e) zero up to 20 percent, based on weight of the composition, of adjuvants, selected from one or more of surfactants, dispersants and co-
25 solvents.

10. A method of inhibiting the growth of microorganisms in a locus comprising introducing to, at or on, the locus a microorganism inhibiting amount of a microbicidal composition comprising:

(a) 0.5 to 20 percent, based on weight of the composition, of
30 haloalkynyl compound;

(b) 0.3 to 10 percent, based on weight of the composition, of chelated metal ion compound;

(c) 40 to 99 percent, based on weight of the composition, of water;
and

(d) zero up to 30 percent, based on weight of the composition, of
3-isothiazolone compound.